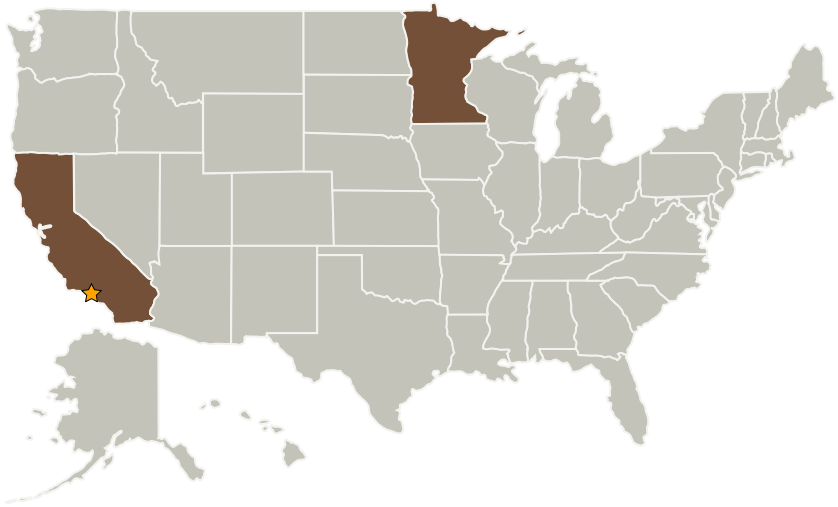
X-Band to W-Band Doppler Radar Using Reconfigurable RF T/R MMIC Series, Phase II

Completed Technology Project (2009 - 2011)

Project Introduction

TLC demonstrated a high performance remote Doppler Radar adjustable X-band to W-band transceiver chip that can perform well as a FMCW, super-heterodyne or pulse radar that meets space qualification specifications. This reconfigurable transceiver will serve as the basis for the precipitation & cloud measurement doppler radar system that will be developed, tested and delivered to NASA in this Phase II effort.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★Jet Propulsion Laboratory(JPL)	Lead Organization	NASA Center	Pasadena, California
TLC Precision Wafer Technology, Inc.	Supporting Organization	Industry Minority-Owned Business, Small Disadvantaged Business (SDB)	Minneapolis, Minnesota

Primary U.S. Work Locations	
California	Minnesota

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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Jet Propulsion Laboratory (JPL)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Project Transitions

December 2009: Project Start

June 2011: Closed out

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Technology Areas

Primary:

- TX08 Sensors and Instruments
  - TX08.1 Remote Sensing Instruments/Sensors
    - TX08.1.4 Microwave, Millimeter-, and Submillimeter-Waves